

Coc # 34

11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

(425) 420-9200 (509) 924-9200 ¥ 420-9210 924-9290

9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

(503) 906-9200 (541) 383-9310

FAX 906-9210 FAX 382-7588

## **CHAIN OF CUSTODY REPORT**

# Work Order #: M105035

CLIENT: Bastol				INVO	ICE TO	):			(Mary					TURN	IAROUNI	O REQUES	T in Business	Days*
REPORT TO: Ave C	ranowedly			1	-		1								Organ	ic & Inorgani	c Analyses	_,
ADDRESS:	naka Island,	Alas	La	1	Bri	2/9	1							10 7	5	4 3	2 1	< 1
														STD.	Petrole	ım Hydrocarb		_
PHONE: 907 - 770 -	0974 FAX: 7	170 C	7975	P.O. N	IUMBE		210		vier v					_ 5	4	3 2	1 <	1
PROJECT NAME: Anch				T	RE(	QUEST	ED ANA	ALYSES						ST			se Specify	
PROJECT NUMBER: 210	90					-									OTH	ER		
SAMPLED BY: A	Charle		e ×			-								*Turnara	ound Requests	less than standa	ard may incur Rush (	Charges.
CLIENT SAMPLE	SAMPLING	2	Cla											MATRIX	# OF	-1,		NCA WO
IDENTIFICATION	DATE/TIME	B	BIT											(W, S, O)	CONT.	CON	MMENTS	ID
101AM P83 135L	5-2501 1646	/	V											5	2			
2.01 AMPB3 14 SL	5-25-01 1548	1	/											5	2			
3.01 AM PB3 15 SL	5-25-01 1650	/	/											5	2			
401 AM PB3 16 SL	5-25-01 1653	/	/											2	2			
5.01AMP83A SL	5-25-01 1658	V	~		2.					,				5	2			
6.01 AM P8318 SL	5-25-01 1700	V	/											5	2			
7.01 AMP83195L	5-25-01 1704	/	/											5	2			
8.01AMP93205L	5-25-01 1707	~	/											5	9			. ,
901AMP83215L	5-25-01 1710	/	V											5	2			
100/AMP83 225L	5-25-01 1713	/	V											5	2			
11. 01 AMP832352	5-25-01 1715	~	V											2	2			
12.01 AM PB3 245L	5-25-01 1718	V	/											5	2			
1301AM AB3255L	5-25-01 1721	V	1	:						:		Y Wa		5	0			,
1401 AMP83 265L	5-25-9 1725	/	1											5	2			
15.01 AMP3025L	5-2501 1642	1									- 1			S	2			
RELINQUISHED BY: Work	Mull	, -	1	DATE:	5/25		RECEI	IVED BY:		MA		*	/					2/52
PRINT NAME: Charlie W	layshall FIRM:	MARS	to (	TIME:		7		NAME:		Step	ston	Wil	500-	FIRM:	NCA			1820
RELINQUISHED BY:	*			DATE:				IVED BY:									DATE	
PRINT NAME:  ADDITIONAL REMARKS:	FIRM:			TIME:			PRINT	NAME:						FIRM:		/	TIMI	5:
	ta: PleasE	Ind	nde	Twi	D K	den	d	51	25/	0 (	10	me	approximate and	726 to	- BTE	TE	EMP:	E OF



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6 December, 2001

Anne Kranawetter Bristol Environmental & Engineering 2000 W International Airport C#1 Anchorage, AK 99502-1116

RE: Amchitka

Enclosed are the results of analyses for samples received by the laboratory on 05/25/01 18:20. If you have any questions concerning this report, please feel free to contact me.

This report was recreated from a previously issued final report in order to provide an electronic copy. The final report used for these electronic copies may have been previously issued as an amended report due to client requested changes to sample names, etc. No data has changed since submission of the previously issued final, or amended, report.

Sincerely,

Stephen Wilson

**Environmental Group Leader** 

1112

Work Orders included in this report:

M105035



Anchorage, AK 99502-1116

Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223

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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Project Number: 21090 **Reported:**Project Manager: Anne Kranawetter 05/27/01 11:53

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01AMP8313SL	M105035-01	Soil	05/25/01 16:46	05/25/01 18:20
01AMP8314SL	M105035-02	Soil	05/25/01 16:48	05/25/01 18:20
01AMP8315SL	M105035-03	Soil	05/25/01 16:50	05/25/01 18:20
01AMP8316SL	M105035-04	Soil	05/25/01 16:53	05/25/01 18:20
01AMP8317SL	M105035-05	Soil	05/25/01 16:58	05/25/01 18:20
01AMP8318SL	M105035-06	Soil	05/25/01 17:00	05/25/01 18:20
01AMP8319SL	M105035-07	Soil	05/25/01 17:04	05/25/01 18:20
01AMP8320SL	M105035-08	Soil	05/25/01 17:07	05/25/01 18:20
01AMP8321SL	M105035-09	Soil	05/25/01 17:10	05/25/01 18:20
01AMP8322SL	M105035-10	Soil	05/25/01 17:13	05/25/01 18:20
01AMP8323SL	M105035-11	Soil	05/25/01 17:15	05/25/01 18:20
01AMP8324SL	M105035-12	Soil	05/25/01 17:18	05/25/01 18:20
01AMP8325SL	M105035-13	Soil	05/25/01 17:21	05/25/01 18:20
01AMP8326SL	M105035-14	Soil	05/25/01 17:25	05/25/01 18:20
01AMP302SL	M105035-15	Soil	05/25/01 16:42	05/25/01 18:20
Trip Blk 05-25-01	M105035-16	Soil	05/25/01 16:42	05/25/01 18:20

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka
Project Number: 21090

Reported:

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

05/27/01 11:53

### Diesel Hydrocarbons (C10-C25) per AK102 North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMP8313SL (M105035-01) Soil					Sampled: 05/	/25/01 Rece	eived: 05/25/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	05/26/01	05/26/01	0105059	
Surr: 1-Chlorooctadecane	80.2 %	75-125							_
01AMP8314SL (M105035-02) Soil					Sampled: 05	/25/01 Rece	eived: 05/25/0	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	05/26/01	05/26/01	0105059	
Surr: 1-Chlorooctadecane	101 %	75-125							
01AMP8315SL (M105035-03) Soil					Sampled: 05	/25/01 Rece	eived: 05/25/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	05/26/01	05/26/01	0105059	
Surr: 1-Chlorooctadecane Surr: Triacontane	44.1 % 99.4 %	75-125 75-125							S-05
01AMP8316SL (M105035-04) Soil					Sampled: 05/	/25/01 Rece	eived: 05/25/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	05/26/01	05/26/01	0105059	
Surr: 1-Chlorooctadecane Surr: Triacontane	54.5 % 97.7 %	75-125 75-125							S-05
01AMP8317SL (M105035-05) Soil					Sampled: 05	/25/01 Rece	eived: 05/25/0	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	05/26/01	05/26/01	0105059	
Surr: 1-Chlorooctadecane Surr: Triacontane	54.4 % 95.4 %	75-125 75-125							S-05
01AMP8318SL (M105035-06) Soil					Sampled: 05	/25/01 Rece	eived: 05/25/0	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	05/26/01	05/26/01	0105059	
Surr: 1-Chlorooctadecane Surr: Triacontane	42.9 % 96.3 %	75-125 75-125							S-05

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Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka Project Number: 21090

Reported:

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

05/27/01 11:53

### Diesel Hydrocarbons (C10-C25) per AK102 North Creek Analytical - Mobile Lab

		Reporting							
Analyte	Result	Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMP8319SL (M105035-07) Soil					Sampled: 05	/25/01 Rece	eived: 05/25/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	05/26/01	05/26/01	0105059	
Surr: 1-Chlorooctadecane	30.5 %	75-125							S-05
Surr: Triacontane	108 %	75-125							
01AMP8320SL (M105035-08) Soil					Sampled: 05	/25/01 Rece	eived: 05/25/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	05/26/01	05/26/01	0105059	
Surr: 1-Chlorooctadecane	80.4 %	75-125							
01AMP8321SL (M105035-09) Soil					Sampled: 05	/25/01 Rece	eived: 05/25/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	05/26/01	05/26/01	0105059	
Surr: 1-Chlorooctadecane	33.8 %	75-125							S-05
Surr: Triacontane	107 %	75-125							
01AMP8322SL (M105035-10) Soil					Sampled: 05	/25/01 Rece	eived: 05/25/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	05/26/01	05/27/01	0105059	
Surr: 1-Chlorooctadecane	47.7 %	75-125							S-05
Surr: Triacontane	103 %	75-125							
01AMP8323SL (M105035-11) Soil					Sampled: 05	/25/01 Rece	eived: 05/25/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	05/26/01	05/27/01	0105059	
Surr: 1-Chlorooctadecane	41.7 %	75-125							S-05
Surr: Triacontane	106 %	75-125							
01AMP8324SL (M105035-12) Soil					Sampled: 05	/25/01 Rece	eived: 05/25/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	05/26/01	05/27/01	0105059	
Surr: 1-Chlorooctadecane	91.4 %	75-125							

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Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka
Project Number: 21090

Reported:

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

05/27/01 11:53

### Diesel Hydrocarbons (C10-C25) per AK102 North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMP8325SL (M105035-13) Soil					Sampled: 05	/25/01 Rece	eived: 05/25/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	05/26/01	05/27/01	0105059	
Surr: 1-Chlorooctadecane	45.8 %	75-125							S-05
Surr: Triacontane	123 %	75-125							
01AMP8326SL (M105035-14) Soil					Sampled: 05	/25/01 Rece	eived: 05/25/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	05/26/01	05/27/01	0105059	
Surr: 1-Chlorooctadecane	21.1 %	75-125							S-05
Surr: Triacontane	110 %	75-125							
01AMP302SL (M105035-15) Soil					Sampled: 05	/25/01 Rece	eived: 05/25/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	05/26/01	05/27/01	0105059	
Surr: 1-Chlorooctadecane	110 %	75-125							

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter 05/27/01 11:53

### BTEX,MTBE and Naphthalene per EPA Method 8021B North Creek Analytical - Mobile Lab

		iii Cittik A		1.10	2110 2100				
Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMP8313SL (M105035-01) Soil					Sampled: 05/	/25/01 Rece	eived: 05/25/0	01	
Benzene	ND	0.0826	mg/kg dry	50	!1B BTEX/MT	Π 05/26/01	05/26/01	0105058	
Toluene	ND	0.330	"	"	"	"	"	"	
Ethylbenzene	ND	0.330	"	"	"	"	"	"	
Xylenes (total)	ND	0.661	"	"	"	"	"	"	
Naphthalene	ND	3.30	"	"	"	"	"	"	
Surr: 4-BFB	96.6 %	50-150							
01AMP8314SL (M105035-02) Soil					Sampled: 05/	/25/01 Rece	eived: 05/25/	01	
Benzene	ND	0.0493	mg/kg dry	50	!1B BTEX/MT	ΓΙ 05/26/01	05/26/01	0105058	
Toluene	ND	0.197	"	"	"	"	"	"	
Ethylbenzene	ND	0.197	"	"	"	"	"	"	
Xylenes (total)	ND	0.395	"	"	"	"	"	"	
Naphthalene	ND	1.97	"	"	"	"	"	"	
Surr: 4-BFB	91.6 %	50-150							
01AMP8315SL (M105035-03) Soil					Sampled: 05/	/25/01 Rece	eived: 05/25/	01	
Benzene	ND	0.0676	mg/kg dry	50	!1B BTEX/MT	Π 05/26/01	05/26/01	0105058	
Toluene	ND	0.271	"	"	"	"	"	"	
Ethylbenzene	ND	0.271	"	"	"	"	"	"	
Xylenes (total)	ND	0.541	"	"	"	"	"	"	
Naphthalene	ND	2.71	"	"	••	"	"	"	
Surr: 4-BFB	88.1 %	50-150							
01AMP8316SL (M105035-04) Soil					Sampled: 05/	/25/01 Rece	eived: 05/25/	01	
Benzene	ND	0.0551	mg/kg dry	50	!1B BTEX/MT	Π 05/26/01	05/26/01	0105058	
Toluene	ND	0.220	"	"	"	"	"	"	
Ethylbenzene	ND	0.220	"	"	"	"	"	"	
Xylenes (total)	ND	0.441	"	"	"	"	"	"	
Naphthalene	ND	2.20	"	"	"	"	"	"	
Surr: 4-BFB	113 %	50-150							

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported:

05/27/01 11:53

Project Manager: Anne Kranawetter

### BTEX,MTBE and Naphthalene per EPA Method 8021B North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
	resur	Limit	Circs	Dilution					Trotes
01AMP8317SL (M105035-05) Soil					Sampled: 05	/25/01 Rece	eived: 05/25/	01	
Benzene	ND	0.0537	mg/kg dry	50	!1B BTEX/M	Π 05/26/01	05/26/01	0105058	
Toluene	ND	0.215	"	"	"	"	"	"	
Ethylbenzene	ND	0.215	"	"	"	"	"	"	
Xylenes (total)	ND	0.430	"	"	"	"	"	"	
Naphthalene	ND	2.15	"	"	"	"	"	**	
Surr: 4-BFB	80.6 %	50-150							
01AMP8318SL (M105035-06) Soil					Sampled: 05	/25/01 Rece	eived: 05/25/	01	
Benzene	ND	0.0515	mg/kg dry	50	!1B BTEX/M	Π 05/26/01	05/26/01	0105058	
Toluene	ND	0.206	"	"	"	"	"	"	
Ethylbenzene	ND	0.206	"	"	"	"	"	"	
Xylenes (total)	ND	0.412	"	"	"	"	"	"	
Naphthalene	ND	2.06	"	"	"	"	"	"	
Surr: 4-BFB	90.0 %	50-150							
01AMP8319SL (M105035-07) Soil					Sampled: 05	/25/01 Rece	eived: 05/25/0	01	
Benzene	ND	0.0584	mg/kg dry	50	!1B BTEX/M	Π 05/26/01	05/26/01	0105058	
Toluene	ND	0.234	"	"	"	"	"	"	
Ethylbenzene	ND	0.234	"	"	"	"	"	"	
Xylenes (total)	ND	0.468	"	"	"	"	"	"	
Naphthalene	ND	2.34	"	"	"	"	"	"	
Surr: 4-BFB	86.0 %	50-150							
01AMP8320SL (M105035-08) Soil					Sampled: 05	/25/01 Rece	eived: 05/25/	01	
Benzene	ND	0.100	mg/kg dry	50	!1B BTEX/M		05/26/01	0105058	
Toluene	ND	0.400	"	"	"	"	"	"	
Ethylbenzene	ND	0.400	"	"	"	"	"	"	
Xylenes (total)	ND	0.800	"	"	"	"	"	"	
Naphthalene	ND	4.00	"	"	"	"	"	"	
Surr: 4-BFB	57.3 %	50-150							

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter 05/27/01 11:53

### BTEX,MTBE and Naphthalene per EPA Method 8021B North Creek Analytical - Mobile Lab

Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
				Sampled: 05	/25/01 Rece	eived: 05/25/	01	
ND	0.0480	mg/kg dry	50	!1B BTEX/M	ΓΙ 05/26/01	05/26/01	0105058	
ND	0.192	"	"	"	"	"	"	
ND	0.192	"	"	"	"	"	"	
ND	0.384	"	"	"	"	"	"	
ND	1.92	"	"	"	"	"	"	
112 %	50-150							
				Sampled: 05	/25/01 Rece	eived: 05/25/	01	
ND	0.0550	mg/kg dry	50	!1B BTEX/M	ГІ 05/26/01	05/26/01	0105058	
ND	0.220	"	"	"	"	"	"	
ND	0.220	"	"	"	"	"	"	
ND	0.440	"	"	"	"	"	"	
ND	2.20	"	"	"	"	"	"	
84.5 %	50-150							
				Sampled: 05	/25/01 Rece	eived: 05/25/	01	
ND	0.0496	mg/kg dry	50	!1B BTEX/M	Π 05/26/01	05/26/01	0105058	
ND	0.198	"	"	"	"	"	"	
ND	0.198	"	"	"	"	"	"	
ND	0.397	"	"	"	"	"	"	
ND	1.98	"	"	"	"	"	"	
87.2 %	50-150							
				Sampled: 05	/25/01 Rece	eived: 05/25/	01	
ND	0.0468	mg/kg dry	50	!1B BTEX/M	ГІ 05/26/01	05/26/01	0105058	
ND	0.187	"	"	"	"	"	"	
ND	0.187	"	"	"	"	"	"	
ND	0.374	"	"	"	"	"	"	
ND	1.87	"	"	"	"	"	"	
74.3 %	50-150							
	ND N	ND	ND	ND	Result	ND	Result	Result

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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter

Reported:

05/27/01 11:53

### BTEX,MTBE and Naphthalene per EPA Method 8021B North Creek Analytical - Mobile Lab

Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
				Sampled: 05/	25/01 Rece	eived: 05/25/0	01	
ND	0.0645	mg/kg dry	50	!1B BTEX/MT	1 05/26/01	05/26/01	0105058	
ND	0.258	"	"	"	"	"	"	
ND	0.258	"	"	"	"	"	"	
ND	0.516	"	"	"	"	"	"	
ND	2.58	"	"	"	"	"	"	
87.0 %	50-150							
				Sampled: 05/	25/01 Rece	eived: 05/25/	01	
ND	0.0686	mg/kg dry	50	!1B BTEX/MT	1 05/26/01	05/26/01	0105058	
ND	0.274	"	"	"	"	"	"	
ND	0.274	"	"	"	"	"	"	
ND	0.549	"	"	"	"	"	"	
ND	2.74	"	"	"	"	"	"	
81.4 %	50-150							
				Sampled: 05/	25/01 Rece	eived: 05/25/	01	
ND	0.0597	mg/kg dry	50	!1B BTEX/MT	1 05/26/01	05/26/01	0105058	
ND	0.239	"	"	"	"	"	"	
ND	0.239	"	"	"	"	"	"	
ND	0.477	"	"	"	"	"	"	
ND	2.39	"	"	"	"	"	"	
84.9 %	50-150							
				Sampled: 05/	25/01 Rece	eived: 05/25/	01	
ND	0.0687	mg/kg dry	50	1B BTEX/MT	1 05/26/01	05/26/01	0105058	
ND	0.275	"	"	"	"	"	"	
ND	0.275	"	"	"	"	"	"	
ND	0.549	"	"	"	"	"	"	
ND	2.75	"	"	"	"	"	"	
94.2 %	50-150							
	Result  ND	Result   Limit	Result   Limit   Units	Result   Limit   Units   Dilution	ND	Result   Limit   Units   Dilution   Method   Prepared	Result   Climit   Units   Dilution   Method   Prepared   Analyzed	Result

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter

Reported: 05/27/01 11:53

### Physical Parameters per APHA/ASTM/EPA Methods North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMP8313SL (M105035-01) Soil				Sampled: 05/25	5/01 Rece	ived: 05/25/0	01	
% Solids	87.3	0.0100 % by Wei	ght 1	Gravimetric	05/26/01	05/27/01	0105061	
01AMP8314SL (M105035-02) Soil				Sampled: 05/25	5/01 Rece	ived: 05/25/0	01	
% Solids	86.5	0.0100 % by Wei	ght 1	Gravimetric	05/26/01	05/27/01	0105061	
01AMP8315SL (M105035-03) Soil				Sampled: 05/25	5/01 Rece	ived: 05/25/0	01	
% Solids	87.6	0.0100 % by Wei	ght 1	Gravimetric	05/26/01	05/27/01	0105061	
01AMP8316SL (M105035-04) Soil				Sampled: 05/25	5/01 Rece	eived: 05/25/0	01	
% Solids	76.5	0.0100 % by Wei	ght 1	Gravimetric	05/26/01	05/27/01	0105061	
01AMP8317SL (M105035-05) Soil				Sampled: 05/25	5/01 Rece	eived: 05/25/0	01	
% Solids	84.0	0.0100 % by We	ght 1	Gravimetric	05/26/01	05/27/01	0105061	
01AMP8318SL (M105035-06) Soil				Sampled: 05/25	5/01 Rece	ived: 05/25/0	01	
% Solids	85.8	0.0100 % by Wei	ght 1	Gravimetric	05/26/01	05/27/01	0105061	
01AMP8319SL (M105035-07) Soil				Sampled: 05/25	5/01 Rece	ived: 05/25/0	01	
% Solids	85.1	0.0100% by Wei	ght 1	Gravimetric	05/26/01	05/27/01	0105061	
01AMP8320SL (M105035-08) Soil				Sampled: 05/25	5/01 Rece	ived: 05/25/0	01	
% Solids	40.2	0.0100 % by Wei	ght 1	Gravimetric	05/26/01	05/27/01	0105061	
01AMP8321SL (M105035-09) Soil				Sampled: 05/25	5/01 Rece	ived: 05/25/0	01	
% Solids	87.5	0.0100 % by Wei	ght 1	Gravimetric	05/26/01	05/27/01	0105061	

North Creek Analytical - Mobile Lab

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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter

**Reported:** 05/27/01 11:53

### Physical Parameters per APHA/ASTM/EPA Methods North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit Units	Dilution	Method Prepared Analyzed Batch Note
01AMP8322SL (M105035-10) Soil				Sampled: 05/25/01 Received: 05/25/01
% Solids	85.5	0.0100% by Weig	ht 1	Gravimetric 05/26/01 05/27/01 0105061
01AMP8323SL (M105035-11) Soil				Sampled: 05/25/01 Received: 05/25/01
% Solids	83.6	0.0100 % by Weig	ht 1	Gravimetric 05/26/01 05/27/01 0105061
01AMP8324SL (M105035-12) Soil				Sampled: 05/25/01 Received: 05/25/01
% Solids	76.7	0.0100 % by Weig	ht 1	Gravimetric 05/26/01 05/27/01 0105061
01AMP8325SL (M105035-13) Soil				Sampled: 05/25/01 Received: 05/25/01
% Solids	84.0	0.0100 % by Weig	ht 1	Gravimetric 05/26/01 05/27/01 0105061
01AMP8326SL (M105035-14) Soil				Sampled: 05/25/01 Received: 05/25/01
% Solids	86.1	0.0100 % by Weig	ht 1	Gravimetric 05/26/01 05/27/01 0105061
01AMP302SL (M105035-15) Soil				Sampled: 05/25/01 Received: 05/25/01
% Solids	83.4	0.0100 % by Weig	ht 1	Gravimetric 05/26/01 05/27/01 0105061
Trip Blk 05-25-01 (M105035-16) Soil				Sampled: 05/25/01 Received: 05/25/01
% Solids	100	0.0100 % by Weig	ht 1	Gravimetric 05/26/01 05/27/01 0105061

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

05/27/01 11:53 Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter

#### Diesel Hydrocarbons (C10-C25) per AK102 - Quality Control

#### North Creek Analytical - Mobile Lab

		Reporting		Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	
Batch 0105059 - 3545 ASE											
Blank (0105059-BLK1)				Prepare	d & Analy	zed: 05/2	6/01				
Diesel Range Organics	ND	150	mg/kg wet								
Surr: 1-Chlorooctadecane	6.13		"	6.25		98.1	75-125				
LCS (0105059-BS1)			Prepared & Analyzed: 05/26/01								
Diesel Range Organics	1470	150	mg/kg wet	1250		118	75-125				
Surr: 1-Chlorooctadecane	9.52		"	6.25		152	75-125			S-02	
LCS Dup (0105059-BSD1)				Prepare	d & Analy	zed: 05/2	6/01				
Diesel Range Organics	1210	150	mg/kg wet	1250		96.8	75-125	19.4	20		
Surr: 1-Chlorooctadecane	4.66		"	6.25		74.6	75-125			S-02	
<b>Matrix Spike (0105059-MS1)</b>	So	ource: M1050	35-01	Prepared & Analyzed: 05/26/01							
Diesel Range Organics	1600	150	mg/kg dry	1420	ND	111	60-140		·		
Surr: 1-Chlorooctadecane	10.0		"	7.11		141	75-125			S-02	

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering

2000 W International Airport C#1 Project Number: 21090

Project Manager: Anne Kranawetter 05/27/01 11:53

#### BTEX,MTBE and Naphthalene per EPA Method 8021B - Quality Control

Project: Amchitka

#### North Creek Analytical - Mobile Lab

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

#### Batch 0105058 - MeOH Extraction

Anchorage, AK 99502-1116

Batch 0105058 - MeOH Extraction	n						
Blank (0105058-BLK1)				Prepared & A	Analyzed: 05/2	6/01	
Benzene	ND	0.0250 n	ng/kg wet				
Toluene	ND	0.100	"				
Ethylbenzene	ND	0.100	"				
Xylenes (total)	ND	0.200	"				
Naphthalene	ND	1.00	"				
Surr: 4-BFB	2.51		"	2.50	100	50-150	
LCS (0105058-BS1)				Prepared & A	Analyzed: 05/2	6/01	
Benzene	2.28	0.0250 n	ng/kg wet	2.50	91.2	69-138	
Toluene	2.31	0.100	"	2.50	92.4	53-151	
Ethylbenzene	2.57	0.100	"	2.50	103	61-141	
Xylenes (total)	7.17	0.200	"	7.50	95.6	62-141	
Naphthalene	2.94	1.00	"	2.50	118	65-135	
Surr: 4-BFB	2.63		"	2.50	105	50-150	

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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

**Reported:** 05/27/01 11:53

#### **Notes and Definitions**

Project Manager: Anne Kranawetter

S-02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds

present in the sample.

S-05 Due to problems encountered with the use of the primary surrogate the results of the back-up surrogate have been used to control

the analysis.

DET Analyte DETECTED

Anchorage, AK 99502-1116

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.

wet Sample results reported on a wet weight basis (as received)

RPD Relative Percent Difference

North Creek Analytical - Mobile Lab

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North Creek Analytical, Inc. Environmental Laboratory Network

#### **Items for Project Manager Review**

LabNumber	Analysis	Analyte	Exception				
			Default Report (not modified)				
			Report recreated from: \\sisters\elmnt\Report\M105035 FINAL 05 27 01 1153.mdb				
0105059-BS1	AK102 (DRO)	1-Chlorooctadecane	S-02				
0105059-BS1	AK102 (DRO)	1-Chlorooctadecane	Exceeds upper control limit				
0105059-BSD1	AK102 (DRO)	1-Chlorooctadecane	S-02				
0105059-BSD1	AK102 (DRO)	1-Chlorooctadecane	Exceeds lower control limit				
0105059-MS1	AK102 (DRO)	1-Chlorooctadecane	S-02				
0105059-MS1	AK102 (DRO)	1-Chlorooctadecane	Exceeds upper control limit				
M105035-01	Solids, Dry Weight		Soil batched as Other dry				
M105035-02	Solids, Dry Weight		Soil batched as Other dry				
M105035-03	AK102 (DRO)	1-Chlorooctadecane	Exceeds lower control limit				
M105035-03	AK102 (DRO)	1-Chlorooctadecane	S-05				
M105035-03	Solids, Dry Weight		Soil batched as Other dry				
M105035-04	AK102 (DRO)	1-Chlorooctadecane	Exceeds lower control limit				
M105035-04	AK102 (DRO)	1-Chlorooctadecane	S-05				
M105035-04	Solids, Dry Weight		Soil batched as Other dry				
M105035-05	AK102 (DRO)	1-Chlorooctadecane	S-05				
M105035-05	AK102 (DRO)	1-Chlorooctadecane	Exceeds lower control limit				
M105035-05	Solids, Dry Weight		Soil batched as Other dry				
M105035-06	AK102 (DRO)	1-Chlorooctadecane	S-05				
M105035-06	AK102 (DRO)	1-Chlorooctadecane	Exceeds lower control limit				
M105035-06	Solids, Dry Weight		Soil batched as Other dry				
M105035-07	AK102 (DRO)	1-Chlorooctadecane	Exceeds lower control limit				
M105035-07	AK102 (DRO)	1-Chlorooctadecane	S-05				
M105035-07	Solids, Dry Weight		Soil batched as Other dry				
M105035-08	Solids, Dry Weight		Soil batched as Other dry				
M105035-09	AK102 (DRO)	1-Chlorooctadecane	Exceeds lower control limit				
M105035-09	AK102 (DRO)	1-Chlorooctadecane	S-05				
M105035-09	Solids, Dry Weight		Soil batched as Other dry				
M105035-10	AK102 (DRO)	1-Chlorooctadecane	Exceeds lower control limit				
M105035-10	AK102 (DRO)	1-Chlorooctadecane	S-05				
M105035-10	Solids, Dry Weight		Soil batched as Other dry				
M105035-11	AK102 (DRO)	1-Chlorooctadecane	Exceeds lower control limit				
M105035-11	AK102 (DRO)	1-Chlorooctadecane	S-05				
M105035-11	Solids, Dry Weight		Soil batched as Other dry				
M105035-12	Solids, Dry Weight		Soil batched as Other dry				
M105035-13	AK102 (DRO)	1-Chlorooctadecane	S-05				
M105035-13	AK102 (DRO)	1-Chlorooctadecane	Exceeds lower control limit				
M105035-13	Solids, Dry Weight		Soil batched as Other dry				
M105035-14	AK102 (DRO)	1-Chlorooctadecane	S-05				
M105035-14	AK102 (DRO)	1-Chlorooctadecane	Exceeds lower control limit				
M105035-14	Solids, Dry Weight		Soil batched as Other dry				
M105035-15	Solids, Dry Weight		Soil batched as Other dry				
M105035-16	Solids, Dry Weight		Soil batched as Other dry				